

North Slope Uintas Restoration Prescribed Fires

Project ID: 3660

Status: Current

Fiscal Year: 2017

Submitted By: N/A

Total Acres: 2,963

Project Manager: Paul Corrigan

PM Agency: U.S. Forest Service

PM Office: Ogden Ranger District

Lead: U.S. Forest Service

WRI Region: Northern

Description:

Three large prescribed fires (total 2,900 acres) are ready for implementation on the Evanston-Mt View Ranger District of the Uinta-Wasatch-Cache National Forest. All three fires share the common objectives of regenerating aspen and improving wildlife habitat. Each burn unit faces a different aspect and they are spread out over 40 miles east to west. For these reasons the Forest Service expects there will be a good burn window for at least one of the projects in the coming fiscal year.

Location:

All three fires are between 8,600 and 9,500 feet elevation. The Mill City prescribed fire is along the Whitney Road west of Mirror Lake highway, six miles south of the Bear River Lodge/Snowpark. It is 904 acres on mostly flat terrain. Blacks Fork prescribed fire is south of Meeks Cabin reservoir. This 1,534 acre burn is on a west aspect. Hoop Lake prescribed fire is at the far east end of Summit County, 26 miles southeast of Mountain View, Wyoming. Hoop Lake is 524 acres on a north aspect.

PROJECT NEED

Need For Project:

Quaking Aspen are in decline throughout the western part of their range. Specifically in this project area, Aspen are in the mature and over-mature life stage and are being replaced by more shade-tolerant conifers. Aspen and its associated understory of grasses and forbs are a vital habitat for all manner of wildlife, including several big game species. There are many reasons for aspen decline, but prescribed fire is a proven tool to start new aspen growth, and large burns have an excellent chance of rejuvenating entire stands which can make it successfully through the seedling stage.

Additionally, the mountain pine beetle epidemic has killed over 50% of lodgepole pines on the Evanston-Mt. View Ranger District. By itself this has not been enough of a disturbance to trigger widespread Aspen suckering. Standing dead trees may be limiting the ability of the forest to convert to an early successional stage. Burning will recycle nutrients and provide increased light on the forest floor to stimulate tree regeneration.

Objectives:

1. Stimulate aspen regeneration; use fire to kill mature aspen and conifer which will trigger the surviving aspen root system to send up new shoots.
2. Improve wildlife habitat. Greater age-class diversity and regeneration of aspen stands will benefit several species. New grass and forb growth following a burn should provide a nutritional/succulent browse component for big game migrating to and from winter range.
3. Maintain communities within their historic range of variation. These fires will be a disturbance that increases the area of early-seral aspen forest, which is currently below normal.

Threats / Risks:

This project will address low regeneration of aspen in the aspen/conifer community. A very high threat to this key habitat is inappropriate fire frequency and intensity. No action would result in older age classes in the aspen/conifer and eventually the replacement of the aspen component with spruce, fir, and lodgepole pine, leading towards a less diverse understory and less habitat value to big game as well as other important wildlife species that depend on the aspen ecosystem. An ecological threshold is quickly approaching at which point entire aspen clones may "age-out" and be lost, converting to forest type to conifer permanently.

Relation To Management Plan:

North Slope Uinta Mountains Restoration Prescribed Fires

Relation to Management Plans

Utah's Wildlife Action Plan 2015

The project area occurs within the aspen-conifer habitat type which is one of the key habitats identified in the Utah 2015 Draft WAP. A very high threat identified in the WAP is inappropriate fire frequency and intensity. Prescribed fire is a top strategy to address this threat. Portions of the burns also include the key habitat of Mountain Sagebrush. <http://wildlife.utah.gov/wap/wap2015draft.pdf>

Utah Mule Deer Statewide Management Plan 2014

The project is designated crucial summer range for Mule Deer. Section IV Statewide management goals and objectives. This project will address Habitat Objective 2: Improve the quality and quantity of vegetation for mule deer on a minimum of 500,000 acres of crucial range by 2013 (p11-12). Strategy F. Encourage land managers to manage portions of pinion-juniper woodlands and aspen/conifer forests in early successional stages. https://wildlife.utah.gov/hunting/biggame/pdf/mule_deer_plan.pdf

Utah Elk Statewide Management Plan (2010)

The project is designated crucial summer range / calving habitat for Elk. It will address Habitat Objective 2: Improve the quality and quantity of forage and cover on 250,000 acres of elk habitat with emphasis on calving habitat and upper elevation elk winter range by the end of this plan. Under this objective, strategies D and F apply. Strategy D. Initiate broad scale vegetative treatment projects to improve elk habitat with emphasis on calving habitat and winter ranges. Strategy F. Encourage land managers to manage portions of forests in early succession stages through the use of controlled burning and logging. Controlled burning should only be used in areas where there are minimal invasive weed and/or safety concerns. This project area is of minimal weed concern. https://wildlife.utah.gov/hunting/biggame/pdf/elk_plan.pdf

Utah Moose Statewide Management Plan (2009)

The project is in moose crucial winter range. It would address the habitat objective: Maintain or enhance the quantity and quality of moose habitat to allow herds to reach population objectives, and habitat strategy D: Initiate prescribed burns and other vegetative treatment projects to improve moose habitat lost to ecological succession or human impacts. https://wildlife.utah.gov/hunting/biggame/pdf/moose_plan.pdf

2003 Wasatch-Cache Revised Forest Plan and Final Environmental Impact Statement

Eastern Uintas Management Area, Chapter 4-Pg. 196: "Active vegetation management and burning will be used to maintain habitat in areas emphasizing terrestrial wildlife habitat." "Riparian vegetation composition and structure (especially in aspen and willow) will be improved providing habitat for beaver and moose."

Forest-wide goal 3, Biodiversity & Viability: Provide for sustained diversity of species at the genetic, population, community and ecosystem levels. Maintain communities within their historic range of variation that sustains habitats for viable populations of species. Restore or maintain hydrologic functions. Reduce potential for uncharacteristic high-intensity wildfires, and insect epidemics. To achieve sustainable ecosystems, meet properly functioning condition (PFC) criteria for all vegetation types that occur in the Wasatch-Cache National Forest. Focus on approximating natural disturbances and processes by restoring composition, age class diversity, patch sizes, and patterns for all vegetation types.

Subgoal 3d: Restore or maintain fire-adapted ecosystems (consistent with land uses, historic fire regimes, and other Forest Plan direction) through wildland fire use, prescribed fire, timber harvest or mechanical treatments. See Forestwide Guideline (G for desired landscape structure and patterns.

Subgoal 3o: Provide adequate habitat components for sustainable big game populations coordinated with State wildlife management agencies, private lands and other resource needs and priorities.

Subgoal 4d. Reduce hazardous fuels (prescribed fire, silvicultural and mechanical treatments) with emphasis on interface communities (wildland/urban) and increase proactive participation of communities at risk. https://fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5347083.pdf

North Slope Deer Herd Management Plan Unit #8 (2012)

Unit Management Goal -Conserve and improve mule deer habitat throughout the unit with emphasis on crucial ranges. Work with private and federal agencies to maintain and protect critical and existing summer and winter range from future [wildfire] losses. https://wildlife.utah.gov/hunting/plans/deer_08.pdf

The Utah Smoke Management Plan (1999, 2006 revision)

Goal #2, To use prescribed fires and wildland fire use to accomplish the land management objectives of wildland fuel hazard reduction, vegetative management, natural ecological practices, and wildlife habitat improvement (p3). https://smokemgt.utah.gov/static/pdf/SMP011606_Final.pdf

The Fire Management Plan for the Uinta-Wasatch-Cache National Forest (FMP 2014)

Goals for the Uinta Fire Management Unit: 5.1 Emphasis on maintaining or restoring forested ecosystem integrity while meeting multiple resource objectives.

(G5.1-1) Timber harvest, vegetation/fuel treatment, prescribed fire and wildland fire use are allowed to maintain or restore proper functioning conditions, for hazardous fuel reduction, to protect property in the wildland urban interface, and to provide for commodity and noncommodity outputs and services.

The purposes of this Act are-- (1) to reduce wildfire risk to communities, municipal water supplies, and other at-risk Federal land through a collaborative process of planning, prioritizing, and implementing hazardous fuel reduction projects; (3) to enhance efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape. <https://www.congress.gov/bill/108th-congress/house-bill/1904/text>

State of Utah Hazard Mitigation Plan (March 2014)

Section 3: Mitigation Strategies

#1 Priority Goal: To eliminate dangerous fuel loading in wildlands.

Objective C: To reduce fuels on public lands.

<https://site.utah.gov/publicsafety/emergencymanagement/UtahHazardMitigationPlan.html>

A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan (U.S. Department of the Interior and the U.S. Department of Agriculture Forest Service 2001)

Goal 2: Reduce hazardous fuels; Goal 3: Maintain and restore fire adapted ecosystems.

<https://www.doi.gov/sites/doi.gov/files/migrated/pmb/owf/upload/10-year-strategy-final.pdf>

National Cohesive Wildland Fire Management Strategy

Page 30: Prescribed fire is one of the more effective and cost-efficient means of managing vegetation for multiple purposes, including hazard reduction, ecosystem restoration or maintenance, silviculture, and others. In general, prescribed fire is an effective tool in areas with fire-adapted or fire-dependent vegetation that has evolved with fire.

<http://www.forestsandrangelands.gov/strategy/documents/strategy/CSPHaseIIINationalStrategyApr2014.pdf>

Fire / Fuels:

This prescribed fire project will address the long-term lack of fire in this fire-adapted ecosystem. Prescribed fire will reduce fuel loads and the potential for future catastrophic fires and beetle outbreaks. One key benefit of burning is the length of treatment effectiveness: potentially decades or longer at these high-elevation sites where fuels accumulate slowly. Conducting a burn under controlled conditions reduces the risk to firefighters and the public from a potential wildfire. Nearby values at risk for wildfire that this project will protect include private land within ¼ mile of the Mill City and Blacks Fork burns, historic tie-hack cabins within ¼ mile, and current residences within ½ mile of Blacks Fork and Mill City.

Water Quality/Quantity:

The project will improve overall watershed health by diversifying age-classes and vegetation types in the three burn areas. Promoting aspen is a valuable goal for water quality as the forest type has very little bare ground and therefore low sedimentation and erosion potential. Burning will temporarily increase bare ground, but only for a maximum of one growing season. If burning in the fall, as is likely, then bare ground may only be an issue for a handful of months before winter arrives and then green up.

Compliance:

NEPA for all three project areas is complete, and covered under the following documents: West Bear Vegetation Management EIS (Mill City), Blacks Fork Salvage EIS (Blacks Fork), and Hoop Lake Sage Wildlife Improvement CE (Hoop Lake). The burn plans for these three areas address all mitigations in these documents to ensure compliance.

Methods:

Qualified crews from the Forest Service and cooperating partners will implement the burn. Hoop Lake may be burned in the spring or fall. Mill City and Blacks Fork will be fall burns. The prescribed fires may be ignited by hand, or optionally by helicopter. Mill City perimeter is entirely on the road system and requires no line construction. Hoop Lake has a ½ mile long handline which is already built, and otherwise relies on roads and streams for holding. Similarly, Blacks Fork may use up to ½ mile of handline but otherwise borders roads and rivers. Utah's Smoke Management plan will be followed in all planning and implementation. Firelines will be rehabilitated post-burn to mitigate erosion.

Monitoring:

There are 16 vegetation monitoring plots in the Blacks Fork Burn and 8 in the Hoop Lake burn. In addition, following each burn the Forest Service will create a report to assess whether objectives are achieved. This may be done by the burn boss or a fire effects monitor. Some sub-objectives will need to be confirmed in out years, for example aspen regeneration, and conifer mortality. The 24 plots are scheduled to be read again at 3 and 5-years post-burn. Both quantitative transects and photo points may also be used to do this long-term monitoring.

Partners:

Public meetings were held in the local community during the planning phases of both the West Bear and Blacks Fork NEPA processes. Notifications for all three projects occurred, and the mailing lists included 50+ interested parties. Comments were solicited, received, and acted upon from the following partners: Adjacent landowners and permittees SK Hart Engineering and Garie Henry; Watchdog-type NGOs, Utah Environmental

There will be excellent opportunities for partnering during the implementation stage. Our pre-burn notification process will contact adjacent landowners. Our partners frequently contribute fire resources to participate in the actual burn, in just the past few years the list includes the Utah Division of Forestry, Fire and State Lands, the BLM, Salt Lake County, local fire departments, and other national forests.

Future Management:

Forest Service monitoring indicates the north slope of the Uintas does not have as much browsing pressure on new aspen as elsewhere in Utah. The 250-acre Dahlgreen Aspen prescribed fire in 2006 has excellent aspen recruitment and survival without grazing rest or wildlife exclosure. The burned units will be monitored for issue. Actions such as fencing or rest could be taken if needed, but the initial hypothesis is that 500+ acre burns are large enough in this area to saturate the browse capacity of ungulates without needing further measures to protect aspen sprouts.

About 30% of both Mill City and Blacks Fork burns have been salvage logged in the last five years. There is no plan for any further logging within or adjacent to any of the burn units. The UWC forest plan prescription for Hoop Lake and Blacks Fork is "Protection, Maintenance or Restoration of Aquatic/Watershed or Terrestrial Integrity with Terrestrial Habitat Emphasis". The prescription for Mill City is "Emphasis on maintaining or restoring forested ecosystem integrity while meeting multiple resource objectives."

Domestic Livestock Benefit:

Burning should temporarily increase forage. The project is also expected to increase forage long-term, because aspen is a more productive forest type as opposed to conifers. The Hoop Lake burn is entirely within the Beaver Creek allotment. Blacks Fork is within the Blacks Fork Cattle allotment and the West Fork Smith Fork allotment. Mill City is entirely in the Gold Hill allotment. Current use is:

Beaver Creek Allotment

125 cow/calf July 5 -- September 10

Blacks Fork Allotment

186 cow/calf July 1 -- September 30

West Fork Smiths Fork Allotment

832 cow/calf July 1 -- September 30

Gold Hill Allotment

1288 ewe/lamb July 11 -- September 20

BUDGET	WRI/DWR	Other	Budget Total	In-Kind Total	Grand Total
	\$60,000.00	\$70,000.00	\$130,000.00	\$25,000.00	\$155,000.00

Item	Description	WRI	Other	In-Kind	Year
Personal Services (permanent employee)	Burn implementation; USFS or cooperator crews, personnel, and equipment. Could include helicopter or other contract. Based on a range of \$50-\$100 per acre.	\$45,000.0	\$60,000.0	\$0.00	2018
Personal Services (permanent employee)	NEPA Planning, Pre/Post monitoring, travel, and vehicle mileage, by USFS personnel.	\$0.00	\$0.00	\$15,000.0	2016
Equipment Rental/Use	Cooperator resources on burn days; Wildland engines from BLM, USFWS, county, or other partners.	\$0.00	\$0.00	\$10,000.0	2017
Personal Services (seasonal employee)	Burn Prep: Line construction, Snagging, Scouting, and Logistics. USFS, FF&SL, or other cooperator crews.	\$10,000.0	\$10,000.0	\$0.00	2017
Materials and Supplies	Burn supplies including fuel	\$5,000.00	\$0.00	\$0.00	2017

FUNDING	WRI/DWR	Other	Funding Total	In-Kind Total	Grand Total
	\$60,000.00	\$70,000.00	\$130,000.00	\$25,000.00	\$155,000.00

Source	Phase	Description	Amount	Other	In-Kind	Year
MDF			\$10,000.0	\$0.00	\$0.00	2017
RMEF			\$10,000.0	\$0.00	\$0.00	2017

Source	Phase	Description	Amount	Other	In-Kind	Year
Safari Club International			\$10,000.0	\$0.00	\$0.00	2017
SFW			\$10,000.0	\$0.00	\$0.00	2017
USFS		2017 and some prior years as well.	\$0.00	\$70,000.0	\$0.00	2017
FNAWS			\$20,000.0	\$0.00	\$0.00	2017
USFS		Could include other cooperators.	\$0.00	\$0.00	\$25,000.0	2017

EXPENSE	WRI/DWR	Other	Expense Total	In-Kind Total	Grand Total
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Source	Phase	Description	Amount	Other	In-Kind	Year
MDF		N/A	\$0.00	\$0.00	\$0.00	
RMEF		N/A	\$0.00	\$0.00	\$0.00	
Safari Club International		N/A	\$0.00	\$0.00	\$0.00	
SFW		N/A	\$0.00	\$0.00	\$0.00	
USFS		N/A	\$0.00	\$0.00	\$0.00	
FNAWS		N/A	\$0.00	\$0.00	\$0.00	
USFS		N/A	\$0.00	\$0.00	\$0.00	

SPECIES

Species	"N" Rank	HIG/F Rank
Mule Deer		1
Threat		Impact
Inappropriate Fire Frequency and Intensity		High
Elk		2
Threat		Impact
Not Listed		NA
Canada Lynx	N4	N/A
Threat		Impact
Not Listed		NA
Moose		3
Threat		Impact
Not Listed		NA
Boreal Owl	N4	N/A
Threat		Impact
Inappropriate Fire Frequency and Intensity		Medium
Wolverine	N4	N/A
Threat		Impact
Habitat Shifting and Alteration		Medium

HABITATS

Habitat	
Aspen-Conifer	
Threat	Impact
Inappropriate Fire Frequency and Intensity	Very High
Mountain Sagebrush	
Threat	Impact
Inappropriate Fire Frequency and Intensity	Medium

PROJECT COMMENTS			
Comment	02/08/2016	Type: Project	Commenter Alan Clark
Paul, I am rooting for you and if funded hope you can pull it off.			
Comment	02/09/2016	Type: Project	Commenter Paul Corrigan
Thanks. There are always challenges when trying to burn but we will approach this project optimistically.			

COMPLETION	
Start Date:	
End Date:	
FY Implemented:	
2017	
FY Completed:	
Final Methods:	
N/A	
Project Narrative:	
N/A	
Future Management:	
N/A	

Map Features			
ID	Feature Category	Action	Treatment/Type
4910	Terrestrial Treatment Area	Prescribed fire	Prescribed fire